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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,421	09/08/2003	Jordan Cohen	112855.122US2	9023
23483	7590	12/08/2008		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER SHAH, PARAS D	
			ART UNIT 2626	PAPER NUMBER
			NOTIFICATION DATE 12/08/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/657,421	<b>Applicant(s)</b> COHEN ET AL.	
	<b>Examiner</b> PARAS SHAH	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 091/8/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 12, and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 12 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |



### **DETAILED ACTION**

1. This communication is in response to the Pre-Appeal Brief filed on 09/18/2008. Claims 1-4, 6-9, 1, 12, and 15 remain pending, claim 15 has been newly added. The Applicants' remarks have been carefully considered, but they do not place the claims in condition for allowance.
2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/2008 has been entered.

### ***Response to Amendments and Arguments***

4. Applicant's arguments (pages 9 and 10) filed on 09/18/2008 with regard to claims 1-4, 6-9, 1, 12, and 15 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-7, 9, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marasek *et al.* (EP 1 271 469) in view of Meredith (US 5,796,916, issued on 08/18/1998) in view of Lumelsky (US 6,081,780, issued on 06/27/2000) in view of Cameron (WO 02/097590 A, published on 12/05/2002).

As to claims 1 and 9, Marasek teaches a method and system for speech synthesis comprising:

receiving a spoken utterance (see Abstract Figure 1, S1, receive speech input S1) (e.g. It is obvious that a microphone is used to input speech in the system.);

in response to receiving a spoken utterance (see Figure 1, S1, speech is received and corresponding processing performed as shown in the steps below S1):

extracting one or more prosodic parameters (see Figure 1, S21m, extract prosodic features) (e.g. It is obvious that a signal processor would be used to extract prosody features such as described in [0042] and is well known in the art.) from the spoken utterance;

performing speech recognition on the spoken utterance to generate a recognized word (see Figure 1, steps S12 and [0040] recognize speech)

generating a prosodic mimic word using (Figure 1, step S40 and S50 and [0046], speech synthesis is performed on the input speech by applying prosody to a given text (see [0003]) and the one or more prosodic parameters (see Figure 1, step S21, prosody parameters are extracted and applied to storage personality pattern as seen in Figure 1, step S30).

However, Marasek does not specifically teach the alignment of the spoken utterance and the synthesized word.

Meredith does disclose the alignment of the spoken utterance to the synthesized speech (see Abstract).

It would have been obvious to one of ordinary skilled in the to art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek by the alignment of the utterance and the synthesized word presented by Meredith. The motivation to have combined the two references includes the improvement in intonation (see Meredith col. 3, lines 5-10).

However, Marasek in view of Meredith do not specifically teach the generation of a nominal word.

Lumelsky does teach synthesizing a nominal word (e.g. The applicant refers to the nominal word as synonymous to synthesized word) corresponding to the recognized word (see col. 13, lines 29-41, synthetic speech is produced

based on a pre-stored voice selected by the narrator. Further in col. 16, lines 45-65, the speech that has been output can be reconfigured by editing or changing the prosody parameters.); and

It would have been obvious to one of ordinary skilled in the to art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek in view of Meredith by the generation of a default voice output as taught by Lumelsky. The motivation to have combined the references involves editing or altering of output based on user preference (see Lumelsky, col. 16, lines 42-65).

However, Marasek in view of Meredith in view of Lumelsky do not specifically disclose the system implemented on a handheld device and at least one of a command to be executed by the handheld device and a name to be dialed by a handheld device and if the recognized word includes the command, executing the command on the handheld device, and if the recognized word includes the name, dialing a number corresponding to the name.

Cameron does disclose the speech synthesis implemented on a handheld device (see page 5, 6<sup>th</sup> paragraph and see page 29, 1<sup>st</sup> paragraph) (e.g. portable is synonymous to handheld and PDA is a handheld device)

at least one of a command to be executed by the handheld device (see page 18, sect. 6, first paragraph, lines 1, command dial makes voice assistant to dial the telephone) and a name to be dialed by a handheld device (see page 18, sect. 6, 2<sup>nd</sup> paragraph, lines 5) and;

if the recognized word includes the command, executing the command on the handheld device (see page 18, sect. 6, first paragraph, lines 1, command dial makes voice assistant to dial the telephone), and if the recognized word includes the name, dialing a number corresponding to the name (see page 18, sect. 6, 2<sup>nd</sup> paragraph, lines 5-9 calls John at business number using autodial).

It would have been obvious to one of ordinary skilled in the to art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek in view of Meredith in view of Lumelsky by the implementation on a handheld device for the purpose of portability, which allows the user to use the device anywhere as is apparent and seen in navigation and translation devices, which incorporate speech recognition and generate a synthetic speech output based on user selection (see Cameron page 5, last paragraph, example of recognition and voice output is described and page 10, bullet 10-page 11, command recognition and speech synthesis) for minimal hand/eye distraction (see Cameron, page 32, 2<sup>nd</sup> paragraph).

As to claim 9, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above. Furthermore, Cameron teaches the use of a processor in for the recognition of command and dialing a number (see Figure 1, CPU)

As to claim 2, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above.



Furthermore, Marasek teaches wherein the one or more prosodic parameters include pitch (see [0042], pitch).

As to claim 3, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Marasek teaches wherein the one or more prosodic parameters include timing (see [0042], speech element duration).

As to claim 4, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above.

Furthermore, Marasek teaches wherein the one or more prosodic parameters include energy (see [0042], loudness).

As to claim 6, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Meredith teaches comprising temporally (see col. 4, lines col. 4, lines 37-53) (e.g. The reference indicates the use of intervals and a pitch point marking) aligning phones (see col. 3, line 5) (e.g. Phones are synonymous to phonetic symbols) of the spoken utterance and phones of the nominal word (see Abstract).

As to claim 7, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Marasek teaches comprising converting the prosodic mimic word into a corresponding audio signal (see Figure 1, steps S40 and S50 and [0048], synthetic speech is output) (e.g. It is obvious that the signal is in audio form in order for the user to listen to the speech generated).

As to claim 12, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 9, above

Furthermore, Lumelsky teaches a storage device (see col. 17, line 22, dsp) including executable instructions (see col. 17, line 21) for speech analysis and processing (see col. 17, lines 17-20, dsp).

As to claims 8, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Cameron teaches the use of a portable telephone (see page 5, paragraph 6, line 4) input device (see page 5, paragraph 6, line 1) and the prosodic mimic word (synthesis and presentation of commands to the user) (see Abstract and page 18, paragraph 2, lines 1-8) is provided to a telephone output device (see page 5, paragraph 6, line 2). Further, Cameron discloses the use of a user interface (see Abstract) utilizing a mobile phone (see page 18, line 7 and

page 5, paragraph 5, line 4) (e.g. It is inherent that a portable telephone encompasses a mobile telephone).

As to claim 15, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Cameron teaches wherein the command is any one of a plurality of available commands (see page 18, sect. 6, first paragraph, lines 1, command dial makes voice assistant to dial the telephone and see page 10, sec. 10, lines 1, where another command search is described and see page 11, bullet c, lines 2, temporal command, hence plurality of commands are utilized)

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:00a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571)272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. S./

Examiner, Art Unit 2626

12/02/2008

/Patrick N. Edouard/

Supervisory Patent Examiner, Art Unit 2626